Approved for use through 9/30/2000. OMB 0551-0532

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Complete If Known FEE TRANSMITTAL Application Number 10/767,281 Patentiees are subject to annual revision. 30 January 2004 Filing Date First Named Inventor TAE-SUNG KIM, et al. Examiner Name WARREN, MATTHEW E. 2815 Group/Art Unit TOTAL AMOUNT OF PAYMENT P57002 (\$) 180.00 Attorney Docket No. **FEE CALCULATION METHOD OF PAYMENT (check one)** Fee Fee Fee Fee Fee 1. ■ Payment Enclosed: Code (\$) Code (\$) Fee Description Paid (CHECK #50586) ■ Check □ Credit Card □ Money Order MISCELLANEOUS Other 1801 \$790 2801 \$395 Request for continued examination (RCE) \$180.00 Charge Any Additional Fee Required Under 37 C.F.R. §1.16 and 1.17. 1806 \$180 Submission of an IDS 1814 \$130 2814 \$65 Statutory disclaimer 8021 \$40 Recordation of assignment per property Applicant claims small entity status. See 37 CFR 1.27 **TRADEMARK** 2. The Commissioner is hereby authorized to charge any deficiency and credit any over payments to: 6001/7001 \$335 Application for registration, per class 6002/7002 \$100 Amendment to Allege Use, per class Deposit Account Number: 6003/7003 \$100 Statement of Use, per class **FEE CALCULATION** 6004/7004 Request for six-month extension of time, per class \$ Fee Fee Fee Fee \$150 Fee Code (\$) Code (\$) Fee Description Paid 6205/7205 \$100 §8 affidavit, per class 6208/7208 **EXTENSION OF TIME FEES** \$200 §15 affidavit, per class 2251 60 6201/7201 \$400 Application for renewal, per class 1251 120 Extension for reply within first month Extension for reply within second month \$ 6403/7403 1252 450 2252 225 \$100 Ex parte appeal, per class 1253 1020 2253 510 Extension for reply within third month **PETITION** Extension for reply within fourth month \$ 1462 \$400 Petitions to Director (Group) 1254 1590 2254 795 1255 2160 2255 1080 Extension for reply within fifth month 1463 \$200 Petitions to Director (Group I) APPEAL 1464 \$130 Petitions to Director (Group II) Petitions to revive unavoidably abandoned \$ 1401 500 2401 250 Notice of Appeal 1452 \$500 2452 \$250 application Petitions to revive unintentionally abandoned \$ 1402 500 2402 250 Filing a brief in support of an appeal 1453 \$1500 2453 \$750 application **PATENT MAINTENANCE** 1403 1000 2403 500 Request for oral hearing CL AIMS 1551 \$900 2551 \$450 Due at 3.5 years Independent claims in excess of 3 \$ 1552 \$2300 2552 \$1150 Due at 7.5 years 1201 200 2201 100 2553 \$1900 Due at 11.5 years 1202 50 2202 25 claims in excess of 20 1553 \$3800 Other Fee (specify) SUBTOTAL: LEFT COLUMN \$ 0.00 \$ 180.00 SUBTOTAL: RIGHT COLUMN Complete (if applicable) SUBMITTED BY Typed or Printed 27,774 Name Robert E. Bushnell, Esq. Reg. Number 21 March 2006 **Deposit Account** Signature Date User ID



Application of: TAE-SUNG KIM, et al.

Serial No.: 10/767,281

Examiner:

WARREN, MATTHEW E.

Filed:

30 January 2004

Art Unit:

2815

For:

NOVEL CONDUCTIVE ELEMENTS FOR THIN FILM TRANSISTORS USED IN

A FLAT PANEL DISPLAY

Information Disclosure Statement

Commissioner for Patents P.O.Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes, and provides copies of the following art references:

FOREIGN PATENT REFERENCE:

Korean Patent Publication No. 10-2002-0055436 to Fujita, et al., entitled ACTIVE
 MATRIX TYPE LIQUID CRYSTAL DISPLAY DEVICE, published on 8 July 2002
 (with English abstract).

OTHER DOCUMENTS:

 Korean Office action for Korean Patent Application No. 10-2003-0015357, issued on 27 February 2006.

DISCUSSION

Fujita KR'436, according to the Korean Office action in applicant's Korean Patent Application No. 10-2003-0015357, discloses that the active matrix type liquid crystal display device includes an active matrix substrate having a transparent insulated substrate on which a thin film

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transistor and a pixel section are formed. A gate electrode of the transistor and a scanning line

connected to the electrode have a TiN/Ti/Al structure or a TiN/Al/Ti structure or a TiN/Ti/Al/Ti

structure. Since a Ti film exists in contact with an Al film, the generation of Al hillock at the Al film

is suppressed. Having the TiN layer at a top layer, surface corrosion at a scanning line terminal

section is suppressed, the increase in the connecting resistance at the section is suppressed and the

reliability is increased.

Pursuant to 37 CFR §1.97(d), the undersigned attorney hereby certifies that each item of

information contained in this Information Disclosure Statement was cited in a communication from

a foreign patent office in a counterpart foreign patent application not more than three (3) months

prior to the filing of the statement.

The citation of the foregoing references is not intended to constitute an assertion that other

or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging

and thorough search of the relevant art.

Pursuant to 37 C.F.R. §1.97(c)(2), the fee set forth under 37 C.F.R.§1.17(p) of \$180.00

accompanies this Information Disclosure Statement. Should the check become lost, be deficient in

payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit

Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,

Robert E. Bushnell Reg. No.: 27,774

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INFORMATION DE CLOSURE STATEMENT PTO-1449 (PAGE 1 OF 1)

SERIAL NUMBER	10/767,281	DOCKET	NO.	P57002			
APPLICANT TAE-SUNG KIM, et al.							
FILING DATE 30	January 2004	GROUP	2815				

U.S. PATENT DOCUMENTS										
EXAMINER		DATE	NAME	CLASS	SUBCLASS	EH DIC DATE				
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)										
Korean Office Action of the Korean Patent Application No. 10-2003-0015357, issued on 27 February 2006										
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EXAMINER:			DATE CONSIDERED:							
EXAMINER:	EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP \$609. Draw line through citation if not in conformance and not considered. Include copy of									